

**REMARKS**

Following entry of the present amendment, Claims 52-58 and 92-98 remain under consideration. Claims 40-42, 60-76, and 81-91, drawn to nonelected inventions, are cancelled without prejudice as the applicants may prosecute the subject matter of the cancelled claims in one or more related applications.

Examiner To and Supervisory Examiner Keith are thanked for the personal interview with the applicants' representatives on May 4, 2006. During that interview, proposed amendments to Claims 52-54, 56, and 58, and a proposed new Claim 98, were discussed. Agreement was not reached as to allowability of any claim, but the examiners suggested modifications to overcome the art rejections. The claims currently amended in this response incorporate those suggestions. (Proposed Claim 98 discussed during that interview is here presented as new Claim 96.)

Claim 52 was rejected as anticipated by *Maekawa* (5,774,073). The applicants respectfully traverse this rejection as possibly applied to amended Claim 52.

Claim 52 defines a system to monitor information of a vehicle traveling to plural different predetermined destinations within a region. A receiver in the vehicle receives vehicle information, and a processor in the vehicle compares that information with a predetermined parameter, namely, the plural predetermined destinations for the vehicle. The processor notes an exception when the vehicle is outside the region encompassing those predetermined destinations. A wireless communication unit, responsive to the processor, transmits the exception to a remote location, where occurrences of the exception are noted and summarized in reports for the vehicle during a predetermined

time. Claim 52 thus defines so-called positive geo-fencing, in which an exception is noted only when the vehicle is outside the defined region.

Support for defining a region and noting exceptions when the vehicle is outside the region is found at Page 11, first full paragraph, of the Specification. Support for the “wireless communication unit”, added in Claim 52 and other claims now in this application, appears in the Specification at page 16, last paragraph; page 27, lines 5-9 and 12-14; page 30, second full paragraph, and elsewhere.

*Maekawa* does not disclose an exception noting or reporting system and does not include a wireless communication unit for transmitting anything from a vehicle to a location remote from the vehicle. Instead, that reference discloses a navigation system to define an optimum route from a current position up to a predetermined destination.

According to *Maekawa*, if the driver deviates from that route, the system recalculates a new route for directing the driver to the predetermined destination. However, *Maekawa* does not disclose a system programmed for the so-called positive geo-fencing as in Claim 52, including a processor programmed to report an exception when the vehicle is outside a region encompassing plural predetermined destinations for that vehicle. Furthermore, as mentioned above, *Maekawa* does not include a wireless communication unit

responsive to the processor and transmitting any such exception to a remote location.

Because *Maekawa* provides information only to the vehicle operator, that reference is not concerned with transmitting information to a remote location nor with summarizing, at the remote location, any departures from the optimum routing determined by that reference.

Accordingly, Claim 52 as currently amended defines a vehicle monitoring system not anticipated by *Maekawa*.

Claims 53 and 56 were rejected as anticipated by *Janky* (5,751,245). The applicants respectfully traverse those rejections as possibly applied to the amended claims.

Claim 53 defines a system to monitor information of a vehicle traveling along a variable route. This system comprises a receiver for receiving vehicle information including location of the vehicle, and a processor programmed to define a certain region restricted from entry by the vehicle. The processor compares the vehicle location to the restricted region, and notes an exception whenever the vehicle arrives at the restricted region while traveling along the variable route. A wireless communication unit transmits such exceptions to a remote location so as to monitor, from that location, occurrences of the exception. (Monitoring certain regions into which vehicle entry is restricted is discussed in the Specification at page 11, lines 3-7, for example.)

*Janky* discloses a vehicle routing system that defines a predetermined route and reports departures from predetermined way-points at particular times. *Janky's* predetermined route is disclosed as the so-called compliance corridor C (Fig. 4) and he monitors compliance with that corridor (column 12, line 65-column 13, line 2; column 13, lines 22-24). In contrast with *Janky*, Claim 53 defines a vehicle monitoring system that is not dependent on any defined or predetermined route. Instead, that claimed system is programmed to define a certain region restricted from entry by the vehicle, and to note an exception whenever the vehicle arrives at the restricted region while traveling along

the variable route. *Janky* fails to disclose the system as defined in amended Claim 53, and so that claim is novel over *Janky*.

Claim 58 was rejected as anticipated by *Westerlage* (5,987,377). The applicants respectfully traverse that rejection as possibly applied to the amended claim.

Claim 58 is amended to define a vehicle monitoring system including a receiver for receiving vehicle information and a processor programmed to determine the length of time the vehicle remains idle at a stationary point. The processor compares that idle time to a predetermined unauthorized idle time, and notes an exception if the time the vehicle remains idle is greater than the predetermined idle time. A wireless communication unit transmits the vehicle information, and each exception, to a central location for monitoring. (The Specification discusses “idle time” at page 10, third full paragraph.)

The rejection asserts that *Westerlage* notes an exception if the length of time the vehicle remains stationary is greater than or equal to a predetermined stationary time. However, the applicants do not find in *Westerlage* any such teaching. Column 8, lines 46-65 of that reference discuss various occurrences that may cause a vehicle to run late for its next predetermined destination, but that reference does not determine idle time at a stationary point, does not teach a predetermined unauthorized time, and does not compare those two values as required by the processor in the vehicle monitoring system of Claim 58. Accordingly, *Westerlage* does not anticipate the system as defined by that claim.

New Claim 98 depends from Claim 58 and adds that the processor is programmed to compare vehicle location to a predetermined location. If the vehicle remains idle at that predetermined location for a time greater than an unauthorized idle time specific for the predetermined location but less than the predetermined unauthorized idle time

(defined in parent Claim 58), the processor notes an exception based on the location-specific idle time at the predetermined location. (The location-specific idle times are discussed in the paragraph bridging pages 10 and 11 of the Specification.) New Claim 98 thus defines, with elements clearly not anticipated by *Westerlage*, a novel system for monitoring vehicle idle times and reporting location-specific exceptions to those idle times. For those additional reasons, new Claim 98 is novel over *Westerlage*.

Claim 54 is rejected as unpatentable over *Maekawa* in view of *Ross* (5,977,884). The applicants respectfully traverse that rejection as possibly applied to amended Claim 54.

*Maekawa*, as discussed above, discloses a vehicle navigation system for guiding a driver along an optimum route to a destination. *Ross* discloses a vehicle radar-detecting apparatus that detects radar signals and also senses the actual speed of the vehicle. *Ross* sounds an alarm when it detects a radar signal and the vehicle speed exceeds an amount preset by the operator of the vehicle.

Claim 54 defines a vehicle monitoring system for plural vehicles each dispatched to different plural predetermined destinations. That claimed system includes a wireless communication unit in each vehicle transmitting speed exceptions to a central location, whereat occurrences of the exceptions are monitored. Nothing in the proposed combination of *Maekawa* and *Ross* discloses or suggests transmitting exceptions in monitored speed to a central location. *Maekawa* is concerned only with providing an optimum route for directing a driver to a destination, and *Ross* is concerned only with alerting a driver to radar speed detection when the vehicle speed exceeds a preset value. Nothing in either reference would have suggested to one of ordinary skill not only

combining the two teachings, but also adding the wireless communication unit and its operation, as now included in the vehicle monitoring system of Claim 54. Accordingly, that claim is patentable over *Maekawa* and *Ross*.

Claim 57 is rejected as unpatentable over *Maekawa* in view of *Higdon* (5,874,889). The applicants respectfully traverse that rejection as possibly applied to amended Claim 57.

*Maekawa*, as discussed above, discloses a navigation system for guiding a driver along an optimum route. *Higdon* discloses a vehicle security system that activates a car-jacking alarm if a security code is not entered within a predetermined time of turning on an ignition switch. The teachings of those two references are so different (*Maekawa*'s optimum-route navigation system; *Higdon*'s car-jacking security system) that one of ordinary skill would not have found it obvious to combine those disparate teachings. Moreover, Claim 57 defines a vehicle monitoring system comprising a receiver for receiving vehicle location and operating information, and a processor to compare that information with a predefined parameter and note an exception based on the comparison. The receiver monitors vehicle operation in response to operation of the vehicle ignition, and a wireless communication unit periodically transfers the vehicle information, as well as exceptions, to a central location for monitoring. *Maekawa* does not monitor or report any exceptions to a central location. *Higdon* transmits a silent alarm to a central monitoring station in response to a car-jacking, but does not disclose a unit that periodically transfers the vehicle information, as well as any noted exceptions, to a central location.

Given the aforementioned differences in purpose and operation of the systems disclosed by *Maekawa* and by *Higdon*, a vehicle monitoring system as in Claim 57 would not have been obvious to one of ordinary skill from the teachings of those references.

New Claim 92 depends from Claim 54, and defines “exception” as wherein the vehicle is traveling at a speed greater than a predetermined maximum speed for the location of the vehicle. (Location-specific analysis of vehicle data is discussed in the Specification at page 7, fourth full paragraph, and at page 31, second full paragraph.) Nothing in *Maekawa* or *Ross*, applied to reject parent Claim 54, discloses or suggests the limitation added by new Claim 92, and so that claim is patentable over the applied art for that additional reason.

New Claim 93 depends from Claim 52, and defines the exception as being when the vehicle is within a defined co-location distance (relative to at least one other vehicle monitored by the system) for more than a predetermined minimum time. New Claim 94 depends from Claim 93 and further characterizes the exception as wherein the vehicle remains stationary for more than the defined duration while that vehicle is in the co-location distance at the same time as at least one other vehicle. New Claim 95 depends from Claim 94 and adds that the exception is noted for all the co-located vehicles when the vehicle remains stationary within the co-location distance at the same time as at least one other vehicle. The applied art discloses or suggests no exception reporting based on predetermined vehicle co-location distance, as defined in new Claims 93-95.

Accordingly, those claims are patentable over the art of record.

New Claim 96 is a vehicle speed monitoring system roughly analogous to the system of Claim 54, but not including the plural-vehicles limitations of that earlier claim.

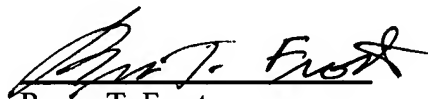
However, the arguments applied above to the patentability of Claim 54 apply equally to Claim 96, and which the applicants submit as being patentable over the art of record.

New Claim 97 defines a vehicle monitoring system including a processor programmed to compare the vehicle location to a predefined parameter which comprises a desired region authorized for entry by the vehicle. The processor notes an exception when the vehicle has entered the authorized region. Claim 97 may thus be considered as a complement to the monitoring system of Claim 52, the difference being that the system of Claim 97 notes an exception when the vehicle reaches the authorized region. The arguments set forth above with regard to the novelty of Claim 52 apply as well to new Claim 97.

The foregoing is submitted as a complete response to the Office action identified above. The applicants submit that all claims remaining in this application are allowable over the art of record and solicit a notice to that effect.

Respectfully submitted,

MERCHANT & GOULD



Roger T. Frost  
Reg. No. 22,176

Date: May 11, 2006

Merchant & Gould, LLC  
P.O. Box 2903  
Minneapolis, MN 55402-0903  
Telephone: 404.954.5100

